

Application of ESEEM to study the structure of free radicals

Zaripov R., Aminova R., Salikhov K.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Manifestations of the hyperfine interaction of paramagnetic particles in their electron spin echo signal decay were comprehensively discussed. Mechanochemically activated calcium gluconate was studied using electron spin echo modulation phenomenon and electron-nuclear double resonance techniques and quantum-chemical calculations. Three possible structures are obtained for free radicals in calcium gluconate. To specify the structure of radicals, further investigations are needed. © 2008 Springer.

<http://dx.doi.org/10.1007/s00723-008-0165-x>
